DOCKET NO.: FCI-2456

Application No.: 09/661,547

Office Action Dated: July 15, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-32 (canceled)

(previously amended) An electrical connector assembly adapted for forming a 33.

mechanical and an electrical connection between a substrate and a component having an

array of fusible elements thereon, comprising:

a first connector half, said first connector half having first and second surfaces, said

first surface having an array of reflowable elements thereon for electrical and mechanical

connection to corresponding mating elements already on the substrate, said second surface

having a first array of connecting elements, said reflowable elements electrically connected to

said first array of connecting elements; and

a second connector half, said second connector half having first and second surfaces,

said first surface having an array of mounting elements thereon for electrical and mechanical

connection to the array of fusible elements on the component, said mounting elements

substantially devoid of solder mass of a volume sufficient for reflowing said second

connector half to the component, said second surface having a second array of connecting

elements adapted to intermate with said first array of connecting elements, said mounting

elements electrically connected to said second array of connecting elements.

(previously amended) The connector assembly according to claim 33, wherein 34.

said array of mounting elements on said second connector half is arranged to correspond to

the array of fusible elements on the component.

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(previously amended) The connector assembly according to claim 34, wherein 35.

each of said mounting elements on said second connector half is situated in a recess.

(previously added) The electrical connector of claim 33, wherein said array of 36.

reflowable elements on said first connector half is an array of ball-type contacts.

(previously added) The electrical connector of claim 33, wherein said array of 37.

mounting elements on said second connector half is adapted to receive an array of ball-type

contacts on the component.

(previously added) The electrical connector of claim 33, wherein said array of 38.

reflowable elements on said first connector half is one of a column grid array, ceramic ball

grid array, tab ball grid array, and plastic ball grid array.

(previously added) The electrical connector of claim 33, wherein each 39.

connecting element on said first connector half comprises two elongated members and each

connecting element on said second connector half comprises one elongated member.

(currently amended) An electrical connector assembly adapted for forming a 40.

mechanical and electrical connection between a substrate and a component having an array of

fusible elements thereon, comprising:

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a first connector half, said first connector half having first and second surfaces, said first surface having an array of reflowable elements thereon for electrical and mechanical connection to corresponding mating elements already on the substrate, said second surface having a first array of connecting elements, said reflowable elements electrically connected to said first array of connecting elements; and

a second connector half, said second connector half having first and second surfaces, said first surface having an array of mounting tail contacts thereon for electrical and mechanical connection to the array of fusible elements on the component, said second surface having a second array of connecting elements adapted to intermate with said first array of connecting elements, said mounting tail contacts electrically connected to said second array of connecting elements, wherein each of said mounting tail contacts extends into and terminates in an opening formed in said first surface of said second connector half, and is spaced apart from said second connector half.

- 41. (previously added) The electrical connector of claim 40 wherein said array of mounting tail contacts on said second connector half is arranged to correspond to the array of fusible elements on the component.
- 42. (previously added) The electrical connector of claim 41 wherein each of said mounting tail contacts on said second connector half is situated in a recess.
- 43. (previously added) The electrical connector of claim 40, wherein said array of reflowable elements on said first connector half is an array of ball-type contacts.

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(previously added) The electrical connector of claim 40, wherein said array of 44. mounting elements on said second connector half is adapted to receive an array of ball-type contacts on the component.

- (previously added) The electrical connector of claim 40, wherein said array of 45. reflowable elements on said first connector half is one of a column grid array, ceramic ball grid array, tab ball grid array, and plastic ball grid array.
- (previously added) The electrical connector of claim 40, wherein each 46. connecting element on said first connector half comprises two elongated members and each connecting element on said second connector half comprises one elongated member.
- (new) An electrical connector assembly adapted for forming a mechanical and 47. electrical connection between a substrate and a component having an array of fusible elements thereon, comprising:

a first connector half, said first connector half having first and second surfaces, said first surface having an array of reflowable elements thereon for electrical and mechanical connection to corresponding mating elements already on the substrate, said second surface having a first array of connecting elements, said reflowable elements electrically connected to said first array of connecting elements; and

a second connector half, said second connector half having first and second surfaces, said first surface having an array of mounting tail contacts thereon for electrical and

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mechanical connection to the array of fusible elements on the component, said second surface having a second array of connecting elements adapted to intermate with said first array of connecting elements, said mounting tail contacts electrically connected to said second array of connecting elements, wherein each of said mounting tail contacts extends into and terminates in an opening formed in said first surface of said second connector half, and remains separated from the second connector half by an air gap until reflow with the array of fusible elements on the component.

- (new) The electrical connector of claim 47 wherein said array of mounting tail 48. contacts on said second connector half is arranged to correspond to the array of fusible elements on the component.
- (new) The electrical connector of claim 47, wherein said array of reflowable 49. elements on said first connector half is an array of ball-type contacts.
- (new) The electrical connector of claim 47, wherein said array of mounting 50. elements on said second connector half is adapted to receive an array of ball-type contacts on the component.
- (new) The electrical connector of claim 47, wherein said array of reflowable 51. elements on said first connector half is one of a column grid array, ceramic ball grid array, tab ball grid array, and plastic ball grid array.

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52. (new) The electrical connector of claim 47, wherein each connecting element on said first connector half comprises two elongated members and each connecting element on said second connector half comprises one elongated member.